

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US03/34811

A. CLASSIFICATION OF SUBJECT MATTER

IPC(7) : G01N 33/00; A01K 67/00, 67/033, 67/027; C12N 5/00, 5/02
US CL : 800/3, 8, 9, 14, 21, 24; 435/325

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
U.S. : 800/3, 8, 9, 14, 21, 24; 435/325

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
CAPLUS, MEDLINE, EMBASE, BIOSIS, LIFESCI, WEST

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	KOHLHEPP, R.L. et al. ROSA26 Mice Carry a Modifier of Min-Induced Mammary and Intestinal Tumor Development. Mammalian Genome. 2000, Vol 11, pages 1058-1062, see entire document.	1-107, 121-237
Y	BRANDON, C. et al. WNT Signaling Modulates the Diversification of Hematopoietic Cells. Blood. 15 December 2000, Vol. 96, No. 13, pages 4132-4141, see entire document.	1, 2, 12-14
Y	LAKO, M. et al. Characterisation of WNT Gene Expression During the Differentiation of Murine Embryonic Stem Cells In Vitro: Role of WNT3 in Enhancing Haemtopoietic Differentiation. Mechanisms of Development. 2001, Vol. 103, pages 49-59, see entire document.	1, 2, 12-14
Y	GASSMANN, M. et al. Maintenance of an Extrachromosomal Plasmid Vector in Mouse Embryonic Stem Cells. Proc. Natl. Acad. Sci. USA. February 1995, Vol. 92, pages 1292-1296, see entire document.	1-8, 16, 17, 22-53, 56-71, 75, 76, 82-87, 90-107



Further documents are listed in the continuation of Box C.



See patent family annex.

* Special categories of cited documents:	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

08 April 2004 (08.04.2004)

Date of mailing of the international search report

27 MAY 2004

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INTERNATIONAL SEARCH REPORT

C. (Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	AHMED, T. et al. Gene Transfer of Alpha Interferon Into Hematopoietic Stem Cells. Leukemia Research. 1998, Vol. 22, No. 2, pages 119-124, see entire document.	1, 2, 4, 5, 7, 11, 15 ----- 121, 123
X --- Y	DECKEL, A.W. et al. Altered Neuronal Nitric Oxide Synthase Expression Contributes to Disease Progression in Huntington's Disease Transgenic Mice. Brain Research. 2002. Vol. 939, pages 76-86, see entire document.	1, 2, 4-6, 8, 11, 32, 33, 35-37, 54, 55, 66-78, 80, 81, 88, 89, 121, 176, 177 ----- 3, 7, 9, 10, 12-31, 34, 38-53, 56, 57- 65, 79, 82-87, 90- 114, 179-237
Y	WEBER, M. et al. Formation of Cartilage Matrix Proteins by BMP-Transfected Murine Mesenchymal Stem Cells Encapsulated in a Novel Class of Alginates. Biomaterials. 2002, Vol. 23, pages 2003-2013, see entire document.	3, 7, 9, 10, 12-31, 34, 38-53, 56, 57- 65, 79, 82-87, 90- 107, 179-237
X --- Y	SATO, K. et al. Cloned Transgenic Mouse Fetuses from Embryonic Stem cells. Hum Cell. December 2001, Vol. 14, No. 4, pages 301-304, see entire document.	1, 2, 4-6, 8, 11, 32, 33, 35-37, 54, 55, 66-78, 80, 81, 88, 89, 121, 176, 177 ----- 3, 7, 9, 10, 12-31, 34, 38-53, 56, 57- 65, 79, 82-87, 90- 107, 179-237

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Box I Observations where certain claims were found unsearchable (Continuation of Item 1 of first sheet)

This international report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claim Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
2. ☐ Claim Nos.:
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:
3. ☒ Claim Nos.: 108-120
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of Item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐
☐

The additional search fees were accompanied by the applicant's protest.

No protest accompanied the payment of additional search fees.